Ethical Considerations in CDHC Sales

Mass CE course #C33943, 3 ethics credits
CT CE course #106708, 3 LRE credits

Introduction and Overview

Consumer Driven Health Care aims to treat medical care purchases like all other consumer purchases such as cars, homes and groceries. It does this by requiring consumers to spend their own money on medical care, up to some specified annual deductible. The assumption underlying CDHC policies is that consumers will shop as well for medical care as they do for cars, homes, groceries, etc.

There's a problem with this assumption: most consumers know *how* to shop for cars, homes and groceries, but few know how to shop for medical care. When shopping for cars, for example, people generally decide what to purchase based on mileage per gallon, safety, resale value, comfort, style and a few other factors.

But people generally don't know about, or how to use, similar medical quality metrics like the Number Needed to Treat or Number Needed for Harm.

- Few consumers know their Starting Risk of developing various medical problems, or the Modified Risk offered by medications, therapies or tests.
- Even fewer can understand which medical claims are meaningful and which are not. In short, *most people don't know how to shop* for medical quality or how to avoid wasting their money on unnecessary medical treatments.

Lacking this knowledge, consumers tend to waste a great deal of money on unnecessary tests, medications and procedures…up to, about, 1/3 of all medical spending, according to numerous research studies.

This raises a major ethical issue for brokers who sell these policies.

- How much should the broker protect the client from making bad medical decisions – either decisions that simply waste the clients' money, or decisions that could lead to medical harm.
- Should the broker teach about medical quality metrics?
- Or should the broker leave his / her clients to fend for themselves?

What ethical responsibilities does the broker have to educate consumers?

This course will exam broker conduct according to two ethical standards: 'let the buyer beware' and 'do your fellow a favor'. Which is ethical? Which is not? And how should an ethical broker proceed?

Part I: Business Ethical Standards

The Traditional View of Business Ethics: 'Do unto others as you would have them do unto you' and 'Love thy neighbor as yourself' are two fundamental ethical dictates of Judeo-Christian religions. We – Americans coming from Judeo-Christian traditions and teaching – believe that we have responsibilities to treat others as we would want them to treat us.

Ethical business considerations fall into two separate categories.[1] **First,** business ethics regulates conduct in direct contact situations, such as with employees, clients or suppliers. These commonly fall into standard categories including employee relations, honest representation and truth in advertising.

These types of ethical issues have an immediacy or personal effect: lying to a customer may induce that person to buy the wrong product. Shading the truth may persuade a client to purchase a policy that benefits the broker inappropriately. In both cases, the only party harmed is the party in direct contact with the unethical broker.

This type of ethical behavior – 'direct contact situations' - will be the focus of this course.

The **second** type of business ethical considerations involves social responsibility. These ethical issues consider how much all of us must take responsibility for society as a whole. Ethical social behavior, for example, includes protecting our natural resources, caring for the poor and providing equal educational opportunities to all. This course will not discuss these types of issues. Hopefully a future course will.

Unequal Knowledge about our Healthcare System

What does 'unequal knowledge about the healthcare system' mean?

Brokers typically know a great deal more about our healthcare system than do their clients. They attend industry conferences and events, read industry journals, share ideas with colleagues, take Continuing Education courses and many other things. As a result, brokers are seen by the marketplace as having expertise about the healthcare system that most other people lack.

[1] This discussion comes from www.besr.org/DCPage.aspx?PageID=199

We will explore the extent to which this professional knowledge creates ethical educational responsibilities for the broker. In particular we ask if *having* all this professional knowledge *creates an ethical responsibility* to share it with their clients.

In developing our position on the ethics of disclosure, we will rely primarily on traditional Judeo-Christian ethics. These have served as the moral and ethical foundation of western civilization for thousands of years. Virtually all the great historical ethicists and philosophers had a deep understanding of these ethical traditions. These permeate our shared views of right and wrong, morals and ethics, and have done so for a very long time.

We Use Judeo – Christian Business Ethical Positions on Disclosure in This Course

We base our discussion on Biblical ethical standards. We present in this course a very activist ethical position based on our interpretation of Biblical sales ethics - specifically the story of Abraham's purchase of a burial plot for his wife.

In basing this course on that Biblical story, we note that it is the first commercial transaction discussed in the Bible. Some Biblical scholars suggest that this placement indicates that the lesson of this story is of primary, or overwhelming importance for businesspeople. Were some other lesson more important, they suggest, then ***it*** would have been placed first and not the full disclosure principle.

Though we base our discussion on Biblical ethical principles, we do not advocate any particular religion - or religion at all, for that matter. We base this course on the Bible because it has served as the ethical basis of western civilization for thousands of years. Living according to Biblical teachings is generally synonymous in our society with living ethically.

Not all brokers will agree with our analysis. Some will think that our interpretation of Abraham's purchase is flawed. Others will argue that the Bible is not relevant to today's health insurance market. Still others will argue that we set an unrealistically high ethical standard for health insurance brokers. Regardless of whether you agree with our activist position or not, we hope that you will consider the ethical issues discussed in this course, and that you will be a better broker as a result.

The First Ethical Principle in the Bible Comes From Abraham's Purchase of a Burial Plot for His Wife

In the first commercial transaction in the Bible, Abraham laid down the 'full disclosure' commercial principle.[2] His purchase from the land seller consists of 5 different steps:

> **Step 1:** Abraham explains what he needs in vague terms – a burial plot for his wife. He does not stipulate where or exactly what kind of burial plot;
>
> **Step 2:** The sellers offer 'the choicest of our burial places';
>
> **Step 3:** Abraham considers this (perhaps even goes on a guided tour of choice burial places) then asks for 'the cave of Machpelah…which is at the end of [the sellers] field', and offers to pay 'full price';
>
> **Step 4:** The sellers confirm that they have exactly what Abraham wants 'the field and cave that is in it';
>
> **Step 5:** The buyer and seller ultimately agree on the land and price and transact the purchase in public 'in the presence of the sons of Heth, before all who went in at the gate of his city'.

Note the similarity with health insurance policy sales:

> **Step 1:** the Buyer explains what he/she needs in vague terms – a policy to cover my family's medical needs, perhaps with some specific issues in mind;
>
> **Step 2:** the Broker says 'we have many quality plans available' and explains them;
>
> **Step 3:** the Buyer considers several options, then stipulates what he/she wants;
>
> **Step 4:** the Broker confirms that a specified policy contains the desired benefits;
>
> **Step 5:** the Buyer enrolls by signing a contract.

It was clear from Abraham's negotiations that he had the opportunity to view the land and cave prior to purchasing. The seller had helped him learn about the land, pointing out the choicest burial place. Indeed, the seller may even have warranted the land: 'none of us will withhold from you his burial place', thereby confirming that this was, in fact, burial property.

The seller apparently understood that Abraham – 'a foreigner and a visitor' – did not know all details about local burial plots. The seller therefore helped Abraham learn

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[2] This genesis of this discussion comes from www.torah.org Business Ethics: The Challenge of Wealth, *Parchas Chayei Sarah, Parchas Metzora, Parshas Shoftim* and *Responsa-Vayigash*

everything that he needed to know so he could make a wise, informed purchase. There was no ambiguity about the land, the location or the use. No confusion about exactly what Abraham bought…because the seller provided such a thorough and detailed education.

'Let the Buyer Beware' is Unethical

The lesson about this transaction? Traditional ethical standards do not contain any concept of 'let the buyer beware'. The seller taught Abraham everything he needed to know about local burial plots, made very clear to Abraham exactly what he was buying and made his declarations publicly.

'Let the buyer beware' assumes that all parties to a commercial transaction have the same information regarding price, quality, use, location, comparative markets, etc. This was clearly not true for Abraham, the 'foreigner and visitor'. The seller could have taken advantage of his lack of knowledge to swindle him – but did not. The seller educated the buyer. This is the ethical business lesson from this story.

'Let the buyer beware' also assumes that all parties have equal abilities to <u>understand</u> the information available. In Abraham's case, he was only able to understand the intricacies of burial plots after being educated by the seller.

- Is this concept still valid today?
- Can 'let the buyer beware' serve as a valid basis for commercial transactions?

The answer is no. Traditional ethics remain valid today - for two main reasons.

First, sellers and buyers rarely have exactly the same information. The seller generally knows his / her products far better than the buyer because the seller deals in this market – for this product – far more frequently than does the typical buyer.

- For example, a broker selling Consumer Driven policies has had feedback from many clients about how they used these policies.
- Or, lacking feedback from clients, the broker attends seminars sponsored by carriers or others involved in the field.

This gives the broker the opportunity to learn from others about their experiences and to ask questions to better serve his/her own clients. In short, the broker learns how well CDHC policies work and how satisfied purchasers are with them. The broker can provide his/her clients with independent information about how well these policies work…or how well they satisfy consumers.

The Biblical Abraham clearly lacked such independent information about burial plot qualities. Abraham's expertise did not include detailed knowledge of local burial plots….just like the health insurance purchaser often lacks detailed knowledge about networks, tiers, Rx copayments, etc. Abraham relied on the burial plot sellers' expertise to guide him…just like many policy purchasers rely on their brokers.

Second, in the real world, sellers can understand their product information far better than the buyer can. This is primarily because the health insurance broker has studied healthcare issues in far greater depth than the typical buyer. Even if the buyer has access to information, he / she often lacks the background and context in which to place that information. Again, this is similar to Abraham's situation. He was a merchant, with expertise in his own arena – not in burial plots. He was not in a strong position to understand burial plot issues without additional education.

Our clients are similar to Abraham. They are accountants, schoolteachers, fishermen or others, with expertise in their own fields, not healthcare. Lacking the broker's healthcare education and background, they are less able to understand healthcare details and issues than the broker.

For these two reasons – that the broker has *better access* to product information and a *better ability to understand that information* – today's health insurance salesperson has an ethical responsibility to educate the client. Just like Abraham's burial plot seller.

Do Your Fellow A Favor

Traditional ethical standards build on this concept and go even further. Many ethical commentaries contain injunctions that forbid the seller from hiding product flaws, and even from creating a false impression.

This is covered in traditional ethical concepts of 'faulty sale'. According to this doctrine, the seller is obligated to make full disclosure of any defect in the goods or services sold. One ethical commentator suggests that 'even where the seller was ignorant of the flaw, the sale may be cancelled' as the buyer cannot be forced to accept a discount as compensation for the defect. [3]

Thus, the broker who claims 'I didn't know that the policy contained that' has no ethical defense: traditional ethical standards make the seller responsible to understand fully all the implications of each health insurance policy. Over time, traditional business ethics evolved and introduced the higher standard. This became known as '***do your fellow a***

[3] Rabbi Dr. Meir Tamari in ibid. Responsa-Vayigash

favor' standard, exactly the opposite of 'seller selfishness'. [4] Now the seller has an even greater ethical burden. Not only must he / she educate the buyer and make full disclosure, but the seller must ***do his fellow a favor*** and highlight problems with the health insurance policy that *may* occur.

Is it enough simply to describe the health insurance policy in detail?

Such a description would include a discussion of copayments and deductibles, exclusions if any, available providers, prescription drug coverage, price etc and then show alternative products and describe them. Though this may satisfy some customers, it does not satisfy our ethical requirement.

How Much Should Brokers Disclose?

The question posed by ethicists above in the discussion of ***do the fellow a favor*** remains: How much should a seller disclose about a product to a customer?

Let's review the doctrine of 'faulty sale' discussed above. That's the doctrine requiring full disclosure of any defect in the goods or services sold, and a cancellation of the sale due to product defects *even if the seller was ignorant of the flaw at the time of sale*.

It is unclear exactly *how much* information Abraham's burial plot seller provided. He apparently provided a great deal, and probably all that was necessary in that circumstance.

But we get into a gray area when applying these lessons to more complicated transactions like health insurance policy sales.

- Is it a 'product defect', for example, if someone buys a high deductible health insurance plan but does not get any advice about how to spend the deductible?
- Is it a produce defect is someone who buys a high deductible plan asks a broker how to locate better quality medical care, but does not get a satisfactory answer?

We don't know. Ethicists seem vague on the issue of 'how much information must the seller provide'. That's why they expanded the discussion to include *do the fellow a favor.* Now we have the ethical tools to address this question.

He Who Does Not 'Do His Fellow a Favor' is Not of the Sons of Abraham [5]

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[4] Ibid.

[5] Dr. Meir Tamari, Parshas Shoftim http://www.torah.org/learning/business-ethics/shoftim.html

Dr. Tamari puts the Biblical ethical position like this:

Sanctity is achieved … by doing or sharing with others, irrespective of the utility or reciprocity... We force one to act contrary to the selfishness of Sodom. [6]

Translating These Ethical Standards to CDHC Policy Sales

The broker who simply describes the health insurance policy by defining the terms and conditions appears to act 'selfishly'. Here's why: The broker knows that his/her clients don't have access to good medical shopping information. He/she knows this because clients often complain that they don't know how best to spend their discretionary medical monies.

We suggest two types of evidence for this: First, numerous studies from highly respected medical researchers indicate that up to 1/3 of all medical spending is wasted on unnecessary care. [7] Second, well informed brokers regularly read anecdotal comments about unnecessary medical testing, medications etc in the popular press and hear them in industry forums. Here are some sample headlines found during a quick google search for 'unnecessary medical care':

> **Doctors estimate $6.8 billion in unnecessary medical tests**, Washington Post, October 31, 2011 [8]
>
> **New research shows how some common tests and procedures aren't just expensive, but can do more harm than good**, Daily Beast, August 114, 2011[9]
>
> **13 common medical tests you may not need**, Boston Globe, January 18, 2012 [10]

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[6] Ibid.

[7] See, for example, Overtreated by Shannon Brownlee, Overdiagnosed by Gilbert Welch, analysis on the Dartmouth Atlas of Healthcare, Understanding Health Insurance by Gary Fradin (approved for CE in many states) and numerous articles by Professors Skinner, Welch, Fisher and Wennberg of Dartmouth Medical School.

[8] http://www.washingtonpost.com/national/health-science/doctors-estimate-68-billion-in-unnecessary-medical-tests/2011/10/28/gIQANpEXZM_story.html

[9] http://www.thedailybeast.com/newsweek/2011/08/14/some-medical-tests-procedures-do-more-harm-than-good.html

[10] http://articles.boston.com/2012-01-18/health-wellness/30634462_1_medical-tests-cervical-cancer-osteoporosis-screening

Thus the broker is aware of these product flaws and is responsible, under the ethical guidelines discussed above, to inform his/her client. The question for the ethical broker becomes, not '*should* I educate my clients about these problems?' but '*how* should I educate them?' We'll have some suggestions in Part 3 of this course. But first, let's review Consumer Driven Healthcare so we have a basis for moving forward with client education.

Part 2: CDHC Overview

CDHC or Consumer Driven Health Care has developed over the past decade. The term 'consumer driven health care' arose primarily from the Medicare Modernization Act of 2003 which established Health Savings Accounts.

This course will present an overview of Consumer Driven Health Care. With that information as a basis, it will describe some cost and quality issues that have arisen in the past decade and discuss how Consumer Driven Health Care can address some of those issues.

In essence, we will suggest that CDHC policies and effectiveness rests primarily on developing educated medical consumers.

The core of CDHC is not simply having high deductible plans that put consumer's 'skin in the game'. Rather, for CDHC policies to become effective and reach their full potential, someone needs to educate consumers about how to choose their medical care.

- We will present 10 short educational modules as examples of consumer education – a prerequisite for true Consumer Driven Health Care.
- We will introduce each Module with a discussion of the medical or insurance issue it addresses and then show how consumers who know this information can make wiser medical decisions than those who do not.

Wiser medical decisions – by definition – lead to better medical outcomes than poorer medical decisions. Somewhat surprisingly, perhaps, better medical outcomes almost always cost less than poorer ones. One reason: better medical decisions lead to fewer missed diagnoses, hospital readmissions, unnecessary tests and unnecessary procedures. This suggests that wiser medical consumers – i.e., those who make the most well-informed medical decisions – are generally the *lowest cost* medical consumers.

This material is particularly relevant to self insured companies. Why? Companies populated by the most well-informed medical consumers will tend to see less medical

waste, better medical care and lower medical costs. Self insured companies stand to reap the greatest benefits from having wise medical consumers as their employees.

The misnomer ‘consumer driven healthcare’ generally applies to high deductible plans. In common insurance lingo ‘consumer driven products’ are those with $1000 or more annual deductibles. Each consumer spends that $1000 as best he/she sees fit – for physician visits, medications, tests or therapies. Only after satisfying the deductible does insurance begin to pay. Then, depending on the specific plan design, insurance pays all or part of additional medical expenses. In theory, when people spend their own money, they shop more wisely and get better value than they would if they only spent the carrier’s money. This is the same theory that underlies other consumer products, ranging from refrigerators to cars to tennis racquets.

Unfortunately, the theory fails in healthcare for two main reasons.

First, an annual $1000 deductible is too small to act as a real medical spending brake. Once satisfied (and depending on the specific plan design) all other medical care is free. A patient might satisfy that $1000 in January and then enjoy lots of excessive medical care for free during the next 12 months.

Or the $1000 has little impact for a patient facing a $50,000 procedure. What’s the difference to this patient if the procedure costs $45,000 …. $50,000….$60,000 or $100,000? Once the deductible is satisfied, the rest is free. ‘Consumerism’ fails to affect patient behavior in this case.

Second, medical consumers have little meaningful quality information. This makes medical decisions different from, say, car purchasing decisions. The car buyer can compare the quality of various cars before deciding which to purchase. Large or small, good gas mileage or poor, lots of luxuries or few, high resale value or low, etc. But the medical purchaser generally has very little similar information.

- Which doctor has the best outcomes? Which hospital?
- How effective is this medication compared to that one?

We generally lack detailed answers to these questions. For these two reasons primarily, we suggest that so-called Consumer Driven Health Care is really nothing more than cost shifting to sick people. These plans have virtually nothing to do with consumerism.

Some healthcare cost and quality issues that CDHC policies were designed to address

American healthcare spending has averaged 2 - 3x the overall rate of inflation since about the 1970s. That has continued since the introduction of so-called Consumer Driven Health Care in 2003. The US overall inflation rate averaged about 3% per year from 2002 – 2012. [11] But US healthcare premium increases averaged about 6.2% between 2002 and 2009 – about double the overall inflation rate. [12] As a result, Americans spend about twice as much on healthcare as Europeans, and far more than emerging economies. Here's a chart showing 2009 per capita spending in various countries as compared with 2009 longevity:[13]

[11] http://www.usinflationcalculator.com/inflation/current-inflation-rates/

[12] OECD Healthdata 2011.

[13] Ibid. Same source for the following 3 charts.

Spending

US	$7,960
France	$3,978
Canada	$4,363
Germany	$4,218
Italy	$3,137
Netherlands	$4,914
Spain	$3067
UK	$3487
China	$309
India	$132

Life Expectancy

US	78.2 years
Canada	81 years
France	81
Germany	80.3
Netherlands	80.6
Greece	81.8
Spain	81.8
UK	80.4
China	74
India	64.5

Similarly, the US consumes more pharmaceutical medications than does any other country. Here are 2009 Rx consumption rates per capita using Purchasing Power Parity data. (This eliminates any exchange rate or domestic pricing discrepancies.)

US	$956
Canada	$743
France	$640
Germany	$628
Netherlands	$472
Greece	$700(approx)
Spain	$578
UK	$400(approx)

What do we learn from these charts …and others comparing cancer screening rates, organ transplants, kidney dialysis procedures, MRI machines etc, all of which show Americans get more medical care? One simple suggestion: more medical spending does not correlate to better medical outcomes. But higher medical spending might actually correlate to poorer outcomes! That's a conclusion from several studies published post-2000. Here is an interesting data comparison as one example:

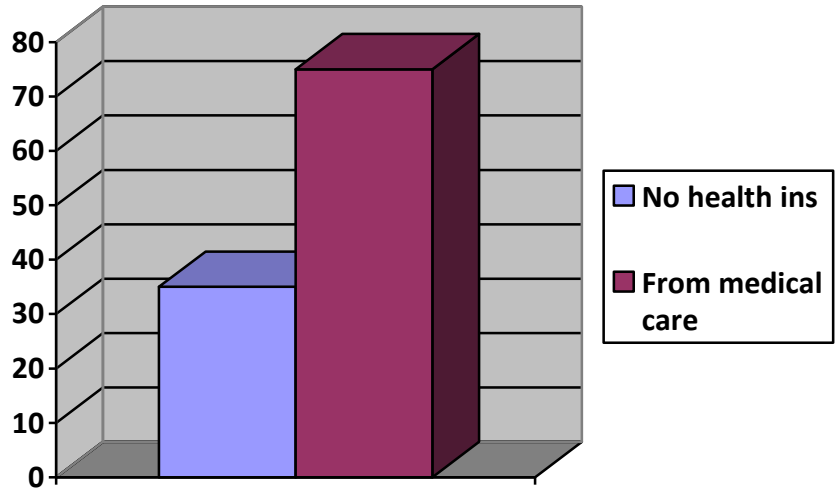
- About 18,000 Americans die annually due to lack of health insurance, according to 'Care Without Coverage' a seminal study by the Institute of Medicine in 2002. That's 18,000 out of the approximately 50 million Americans who lack health insurance.

- About 187,000 Americans die annually due to harm from our medical care system (errors, infections, inappropriate care etc). [14] That's out of about 250 million insured.

Your chance of dying from no insurance is about .035%. But your chance of dying from medical system harm is about .075%...**twice as much!** (Fortunately, few people die from either of these causes. But surely the ratios indicate a problem!)

Relative Chance of Death
from no health insurance and from the medical care system

Data from 2002 Institute of Medicine, **Care without Coverage** and the 2011 Health Affairs article estimate.



[14] Goodman, Health Affairs, 2011

Let's tie this back to Consumer Driven Health Care. Spending money on medical care unwisely leads to two distinct problems. First, you waste money – never a good idea. Second, you may get harmed. The unsettling data presented above indicates that poor medical care choices can hurt you. Nonetheless, Consumer Driven Health Care in the form of high deductible insurance policies seems here to stay. In fact, average deductibles have grown over time, with many brokers and commentators suggesting that we'll see $2000, $3000 or possibly even $5000 deductibles commonly in the future.

This concerns self funded entities

Healthcare waste – medical spending that does not improve patient outcomes – most directly affects self funded entities. Each wasted $1 of medical spending comes directly from the self funded entity.

We define 'self funded entities' differently from many commentators. To us 'self funded entities' means that some entity – a company *or an individual* – is out-of-pocket for medical spending.

- Thus, for our purposes, a self funded entity can be a *company* that self insures.
- Or a company that fully insures, but pays for the employee's deductibles (in whole or in part).
- Or an *employee* who is responsible for paying his/her own deductible.

In all these cases, someone or some company pays directly each time an employee wastes medical care. Reducing medical care waste can directly impact the company or individual.

The broker clearly has a heightened ethical disclosure responsibility when dealing with self funded accounts. Remember the first definition of business ethics that we discussed earlier: conduct in direct contact situations, such as with employees, clients or suppliers including issues that have an immediacy or personal effect like shading the truth and thus persuading someone to spend money unnecessarily.

In self funded accounts under our definition, a person or company that seeks advice from a benefits professional may actually lose money. This is an example of 'direct contact situations' where the principle of 'do your fellow a favor' can clearly be seen.

How an ethical broker can help a self funded entity address these problems

The ethical broker can advise 'self funded' entities (by our definition) about the risks of medical care so they identify and avoid it. Unnecessary medical care is care that does not benefit the patient but increases the costs and risks of harm. Many medical researchers estimate that unnecessary medical care accounts for up to about a third (1/3!) of all US medical spending. [15] Here are some basic facts:

- The average US employee annual premium is about $10,000
- Up to about $3300 of that is wasted on unnecessary medical care

Well-informed employees, who choose their medical care more wisely, may reduce that $3300 of waste.

We suggest that the broker has an ethical responsibility to educate clients about the risks of unnecessary care for two main reasons:

First, under the 'full disclosure' principle, brokers – i.e. the sellers of products – must inform their clients of everything they know about the product. The Bible / Torah makes this abundantly clear in the story of Abraham's purchase of a burial plot for his wife. In today's case of unnecessary care, the broker knows that many tests and treatments are ineffective and wasteful. He / she has an ethical obligation to inform clients of this.

Second, under the 'do your fellow a favor' principal, the broker must disclose everything he / she knows about how people use their product, in this case, how people use their health insurance. The broker knows that many tests and treatments are unnecessary and potentially harmful (because of the broker's superior knowledge of the healthcare industry). The broker is obligated in this direct contact situation to help the 'self funded' entity avoid spending money unnecessarily.

We will devote the rest of this course to examples of employee education that are designed to reduce the amount of medical waste and thus to give brokers specific education tools to use so they can live up to their ethical responsibilities.

We do this in the form of short education modules. Each makes one key point, and teaches employees one key question to ask their own physician. Remember that the modules in this course are specifically designed to do some of all of these three things.

[15] Some references for this: Henry Aaron, NEJM October 30, 2008; Catherine Arnst, BusinessWeek cover story November 12, 2009 '10 Ways to Cut Healthcare Costs Right Now'; ABC News December 5, 2011 'Up to 1/3 of Health Spending is Wasted', Shannon Brownlee 'Overtreated' and numerous articles by researchers affiliated with Dartmouth Medical School, including Elliott Fisher, John Wennberg, Jonathan Skinner and others.

- First, each module can teach the broker about healthcare system inefficiencies. The broker can use this knowledge when advising clients about benefits.
- Second, the broker can use these modules as part of an educational process with clients.
- Third, the broker can design his/her own educational programs for his/her own clients. These modules can serve as a template for that purpose. The modules build on each other, so the information in early modules is used in later ones.

Most of these modules are organized similarly, with a question or statement followed by a short explanation. We designed these – more or less – as conservations between a somewhat skeptical patient and a teacher. We hope this makes each module interesting to read and relevant to you.

Part III: Ethical Practices in CDHC Sales

Ten education modules to help brokers 'do their clients a favor' and not 'let the buyer beware.'

These modules are set up as questions from a consumer and answers from an expert (for example, a broker). They follow the general ethical format established in the Bible when Abraham purchased a burial plot for his wife and apply the ethical principles established there to healthcare. All footnotes and references at the end of this course.

Module #1: Understanding Medical Claims

This module shows employees which medical claims are meaningful and which types of medical data to believe. Employees who know this material will more likely make wise medical decisions – in other words, choose medical care that can benefit them. Employees who do not know this material will more likely based their medical decisions on the wrong information, often to their financial or health detriment.

Most of this and future modules follow the same format: an exposition or introductory statement, followed by a series of questions to lead the reader / student through the thought process.

Introductory Statement of the Problem:

Sometimes we see ads that claim '*this medication reduces your heart attack risk by 33%*' or '*this test reduces breast cancer mortality by 20%*'. This Module helps you understand the answers...*which is harder than you may think!*

Can you give me an example?

About 3 in 100 folks *with* high cholesterol but *without* heart disease will have a heart attack in the next few years. Statins – cholesterol lowering medications like Lipitor and Crestor – reduce this to about 2 in 100**.** Thus statins prevent about 1 heart attack per 100 patients.

Here's a question that confuses many people: How many heart attacks do statins prevent?

What is the answer?

Well, there are actually two answers
Answer #1: statins prevent about 1% of heart attacks. In fact, they prevent about 1 heart attack per 100 people who take them.

Answer #2: statins prevent 33% of heart attacks. In fact, they cut the number of heart attacks from about 3 to 2 in 100.

1% or 33%?

How many?

1% is based on 100 people who take statins.

3 *would have had* a heart attack; 2 *had* heart attacks; 1 benefited

1 = 1% of 100

Where does 33% come from?

33% is based on the number of people who had heart attacks.

3 *would have had* heart attacks without statins; 2 *had* heart attacks; 1 avoided it

1 is about 33% of 3!

I'm confused

We can make up lots of different numbers. Here's an easy way to discover the most important number for *most* people. Pose this question to your doctor:

Out of 100 people like me who take this medication, how many will avoid a first heart attack?
You can also ask about screening tests, other medications, surgical procedures, therapies, etc.

Ask in exactly this form!

What about the answer?

Form matters!
Be sure to get your answer in the same form.

For example:

1 out of 100 who take this medication will avoid a heart attack or
15 out of 100 who have this screening test will avoid dying of cancer
Answers like 'about a third' or '40 – 50%' may measure other things and confuse you!

Why are there so many different numbers?

Sometimes researchers and reporters themselves wonder how to report medical claims:

Should they quote *percentages* or *absolute numbers*? Should they show *bigger numbers* to generate more discussion or *smaller numbers* to be conservative?

Sometimes corporate marketers use numbers to promote their products.
Beware!

A 33% reduction has more impact than a 1% reduction.

Can you give me an example?

Here's an analogy to help you.

Would you buy a second lottery ticket?

Consider two statements:

#1: If you buy a second lottery ticket, you double your chance of winning. Your chances of winning increase by 100%

#2: If you buy a second lottery ticket, you increase your chance of winning by about 1 in one million...or by .000001%

Both statements are ***true*.** But ask yourself:

If I'm *selling* lottery tickets, which would I use? or
If I'm *buying* lottery tickets, which would I consider?

The same is true for medicine!

Yes! Most medical claims are true, but.....

Some may be *misleading!*

Your problem as an informed medical consumer:
Decide which numbers are meaningful.

We've tried to simplify all this by suggesting 1 simple question to ask.

What was that question again?

Out of 100 people like me who take this medication, how many will benefit?

Can you give me a Rule of Thumb about the answer?

A Rule of Thumb

If the answer is 80 out of 100 people benefit, then you probably will also.

But if the answer is 5 or fewer, then you may want to consider other options.

Anything else?

The bonus question

Once you learn how many out of 100 benefit, you can follow up with
how many out of 100 are harmed?

Then – *and only then* – can you determine if the medical intervention is more beneficial than harmful, or more harmful than beneficial!

Make sure your harm question is answered like this:

x out of 100 who take this medication are harmed by it.

What should I do next?

Your Homework

The next time someone says 'this is a good medication' or 'this test reduces your risk', ask

Out of 100 people who have it, how many benefit?

You may be surprised by the answers!

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Module #2: How to choose a hospital

Choosing the best hospital for your care can improve your chances of enjoying a good outcome. But choosing the wrong hospital may increase your risk of being harmed. People choose hospitals based on many different factors: geography, reputation, referrals, friend's experiences,

etc. Some of these factors are relevant to patient outcomes while others are not.We suggest in this module one particular criterion for choosing a hospital. Consider whether or not you find it useful. And consider whether or not your clients might.

Introductory Statement of the Problem

Hospitals differ!

Choosing *wisely* can improve your health greatly; Choosing *poorly* may harm you.

This Module helps you choose your hospital wisely.

How would a wise consumer choose a hospital?

We suggest choosing hospitals based on *outcomes for people like you***.**

...outcomes for people like me...

What are outcomes?

Outcomes mean 'how well patients did'.

Some good outcomes:
Successful surgery
Complete patient recovery
Timely discharge without readmission

Some bad outcomes:
Patient infections
Readmission shortly after discharge
Death

Who are *people like you*?

'*People like you***' are people who have your medical condition.**

For example:

If you have kidney failure, 'people like you' also have kidney failure
If you have liver disease, 'people like you' also have liver disease

Who are *not* people like you?

People like you are not, for our purposes, your age, occupation, socio-economic status, demographic group, or p*eople hospitalized for a different medical problem from you*

Why does this matter?

You want great medical care

A hospital might be excellent at treating one kind of patient but relatively poor at treating another.

What you really care about is how well the hospital treats ***you*** -

not how well they treat people who are *different* from you.

For example?

Some Massachusetts hospitals
(the same pattern exists in other states)

Here are the 4 Massachusetts hospitals with the lowest *heart failure* mortality rates:(1)

#1: Southcoast Hospital, Fall River (the best)
#2: Brigham and Women's Hospital, Boston
#3: Ana Jaques Hospital, Newburyport
#4: Faulkner Hospital, Boston

But here are the 4 Massachusetts hospitals with the lowest *pneumonia* mortality rates:

#1: Norwood Hospital, Norwood (the best)
#2: Falmouth Hospital, Falmouth
#3: Boston Medical Center, Boston
#4: Mt Auburn Hospital, Cambridge

(1) These are risk adjusted mortality rates, as reported by the US Dept of Health and Human Services for Medicare patients between June 1, 2006 and July 31, 2009. Risk adjustment discounts illness severity differences among patients, so avoids penalizing some hospitals for treating sicker patients.

Different hospitals! Why not just choose a hospital for its technology?

Great technologies run by poor operators may cause more harm than good.

For example, doctors who perform robotic-assisted prostate cancer surgery aren't proficient and able to remove all the malignant cells until they have done the procedure more than 1,600 times.

You don't want to be patient #15, or #38 or #200!

What about a famous surgeon?

The surgeon is only one member of your medical team. Other members:

Operating room nurses
Recovery nurses
Patient floor nurses
Residents
The discharge team
The post-discharge team ... and more

All need to work together for the best patient outcomes.

A **brilliant surgeon** with a **poor post-discharge team** may generate poorer outcomes than an **average surgeon** with an **excellent team**.

The only way to know how well your medical team works together: **determine *outcomes for patients like you*.**

Remember...

Medicine is a Team Sport

You need the entire team - people, processes and technologies - working together on your behalf.

Choosing a hospital based only on a *component* of that team -- the surgeon, medical school affiliation, technology or other - is unwise.

It's analogous to betting on a football team only because of its quarterback;
A winning football team also needs a good defense, coach, receivers, kicker etc.

A medical team with lots of experience working together may outperform a set of outstanding individual components....just like in football.

That's why we recommend choosing hospitals based on *outcomes for people like you.* That tells you how well the medical team works together.

How can I learn *outcomes for people like me*?

Ask your doctor!

When your doctor refers you, ask *what are their outcomes for people like me?*...
and explain why you're asking.

Remember:
You'll probably need to lead the discussion since your doctor's busy and
most people don't ask!

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Module #3: How to choose a specialist

Some 70%+ of all physicians in this country are specialists. We have, today, specialists for virtually every body part, from brain surgeons and psychiatrists for the head to podiatrists and orthopedic surgeons for the feet. Indeed, when we have a medical problem, we can often choose among many different physicians within the same specialty. For example, if you have a coronary problem, you may have a choice of several different cardiologists. How can a wise medical consumer decide? We offer one criterion below. As you read this, consider if you find it useful yourself. And consider whether or not your clients might also find it useful.

Introductory Statement of the Problem

Specialists differ!
(and not just by specialty)

Some have warm, wonderful bedside manners;
Others are quieter but excellent diagnosticians.

Some perform lots of tests;
Others test less.

Some embrace new medications and technologies quickly;
Others adapt to change more slowly.

This module focuses on one simple question:

How should a wise consumer choose?

Outcomes for people like you
We suggest choosing specialists based on their *outcomes for people like you.*
(Sound familiar?)

In the last Module, we suggested choosing *hospitals* based on their outcomes for people like you ...

This month, we make the same suggestion about choosing specialists.

What are outcomes again?

Outcomes mean 'how well patients do'

What are some outcome questions?

How quickly do patients like you *return to their prior health status*?
How often does surgery *help* patients like you?
How often does surgery *harm* patients like you?

outcomes for people like me...

Who are *people like me*?

People like you
People like you have your medical condition.

For example, if you have minor back pain - that only affects your tennis game - people like you also have minor back pain. But if you have major, chronic back pain that affects your ability to walk, people like you also do.

You want to choose a doctor who's really good at treating patients like you...
not patients who are different from you.

How can I get outcome information?

Unfortunately...
We don't have very good information about patient outcomes by physician.

Harvard Business School's Michael Porter put it this way:

'In only a few isolated disease areas - notably cardiac surgery, organ transplants, cystic fibrosis and kidney dialysis - is broad-based results information available.'

Porter goes on to say

'most physicians lack any objective evidence of whether their results are average, above average, or below average.'

So what can I do?

Ask your specialist two questions
Question #1: What *outcome* information do you have about your own patients?

Be sure to use the word ***outcome***.

Some specialists may keep detailed records and will share them with prospective patients if asked.

Beware of Porter's warning about doctor's impressions of their own competence:
'it is human nature for most people to believe that they are above average, which cannot be true'
(Some specialists *must* be below average.)

What's the second question?

Question #2
How many patients like me have you treated?

Many studies suggest that *the more experience* a doctor has treating patients like you, *the better the outcomes*.

In other words,

experience treating patients like you is often the most important indicator or your likely outcome.

Anything else?

the Bonus question

When your PCP gives you a referral...
Ask the same 2 questions!

What are this specialist's *outcomes for patients like me*?
and
How many *patients like me* has this specialist treated?

Your questions may surprise your PCP but...

they may help him/her make the best referrals to you.

What's the moral of this story?

Ask good questions
Whenever you consider a specialist for medical care, ask the ***outcome*** question
(*what are your outcomes for patients like me*)

and the ***quantity*** question
(*how many patients like me have you treated?*)

The answers may guide you to better care... and better health.

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Module #4: How to choose a Primary Care Physician

Most insured employees have a primary care physician. This is, in part, a holdover from the old managed care days, when the PCP served as gatekeeper and a necessary source of referrals to specialists and hospitals. Today the PCP can serve a different function: an advisor who knows you and knows your overall medical condition. As a result, we suggest that the criterion for choosing a primary care doctor differs from the criteria for choosing a specialist. In short, they perform different functions. As you read this module, consider how it may help you choose a good PCP…and how it may help your clients also.

Introductory Statement of the Problem

The last 2 modules suggested definitions of a good hospital and a good specialist.

Good hospitals and good specialists get ***good outcomes for patients like you.***

Today's question:

Can we apply the same criterion ... *outcomes for patients like you* ... to PCPs?

No! (In our opinion)
Primary care doctors are different.

Different?

Keeping you healthy vs. returning you to good health
Primary Care Physicians are generally more responsible for *keeping you healthy* than for *returning you to health after an illness*.

Hospitals and specialists are generally more responsible for returning people to good health or for managing chronically ill people.

PCPs typically have large caseloads of healthy people and aim to keep them healthy.

... *keep me healthy* ...

How should I - a healthy person - choose a PCP to keep me healthy?

Choose someone you can partner with
We suggest choosing your PCP based on how he/she ***relates*** to you.

Physicians have different personalities, styles, approaches, values and medical philosophies.

Choose someone you respect and can speak honestly with.

What makes a true partner?

The human connection may be key
Dr. David Newman of Columbia Medical School puts it this way:

Find a doctor who understands that the human connection is a healthcare tool.

The human connection allows you to discuss your health, treatment issues and concerns...
because *you have lots of treatment options, choices and decisions to make*.

Lots?

Yes!

Some excellent PCPs refer to aggressive specialists who like to operate as soon as possible;
others to conservative specialists who prefer to watch and wait before surgery

Some prescribe the newest medications as soon as they are FDA approved;
Others are more cautious and prefer to wait

Some give lots of tests to avoid missing a disease diagnosis;
others give fewer tests to avoid inaccurate results or too much radiation

Some like to talk more and test less;
Others are just the opposite

Some prescribe cholesterol-lowering medications when your total cholesterol hits 200;
Others wait until it's 220, 240 or even higher...
And some don't prescribe it at all!

There are often not *right* or *wrong* approaches.
Instead there are advantages and disadvantages for you and your PCP to discuss ...

...if you have a real PCP partner...

Partner in my care

A true patient-PCP partnership helps you decide which approaches work best ***for you***.

Aggressive or conservative?
More tests or fewer?

Ask yourself:
Do you and your PCP really partner in your medical decision making?

Many people *report* that they do ...

Do they in fact?

Probably not!
Research suggests that what most people describe as ***participating*** really just means ***agreeing with their physician's recommendations after a brief discussion.***

Research also suggests that optimal medical decisions - and the best medical outcomes - often come when patients participate fully in a shared decision-making process.
Not when they delegate decisions to their doctors.

You need to feel comfortable with your PCP to engage in these discussions....

Can you give me an analogy?

Different diets work for different people

Some follow the Scarsdale diet, others the Atkins diet, or the South Beach diet,
the Cabbage Soup diet, the Carb Lover's diet, the Glycemic Index diet,
the Grapefruit diet, the Zone diet, the Mediterranean diet,
the Park Avenue diet, the Sonoma diet, the Mayo Clinic diet,
the Big Breakfast diet, the Morning Banana diet, the Protein Power diet ...
or something else.

Lots of different diets generate about the same result --- weight loss.

The question isn't *which work?* But

***Which work for me*?**

Exactly. You and your PCP partner should answer that question together

We are used to thinking that a doctor's ability depends mainly on science and skill, suggests Dr. Atul Gawande of Harvard Medical School. But *these may be the easiest parts of care*.

The human connection with your PCP may be even more important than your doctor's technical skills in *keeping you healthy*.

The human connection helps you get the care that's most appropriate *for you*.

What's a good test of my PCP partnership?

Here's a way to test your relationship with your PCP

If you ask your PCP this question about a medical situation

What would you do if you were me? ...

Do you believe his / her answer?

If not, maybe you need a new PCP.

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Module #5: How can you tell if medicine works?

This module refers back to some of the information discussed in the first module. There, we discussed which numbers apply to you, and suggested asking this question to your doctor: out of 100 people like me, how many will benefit from this medication, test or therapy? In this module, we discuss the types of information that can usefully answer that question. In particular, we explain the difference between observational evidence and comparative evidence. The latter is useful and meaningful, and can help you make wise medical decisions. The former is far less useful and may well be biased. As such, relying too heavily on observational evidence may ultimately harm the patient, but adding unnecessary costs and risks to his/her medical treatment.

Introductory Statement of the Problem

It's obvious when medicine works - a sick person becomes healthy.

We see this every day. We call these *observations*. We *observe* that someone got healthier.

But how do we know if medicine really helped ...
or if the person would have gotten healthier anyway?

For example...

A knee pain question
Let's say your knee hurts when you walk. If you rest, your knee will get better. If you rest and eat bananas, your knee will get better. Was it the rest or the bananas that made your knee get better?

My knee got better. Do I care?

Yes!

If you don't know why your knee got better, you might get unnecessary knee surgery!

Oh, come on now...

Here's a study from the New England Journal of Medicine

Some people in pain from an arthritic knee had surgery, recovered and felt better.

Pain gone. The surgery worked. **Yay!**

But some *other* people with arthritic knee pain had *fake* surgery, recovered and their knees also felt better. **Oops.**

That was exactly the situation at the Houston VA when, in a controlled experiment, a surgeon performed both real and fake procedures on different people.

The goal: see if real arthroscopic knee surgery works better than a placebo to reduce arthritis pain.

The result, quoting from the NEJM: arthroscopic surgery
'is not better than and appears to be equivalent to a placebo procedure in improving knee pain.'

What?

The study's conclusion means

Arthroscopic knee surgery provides no benefit for arthritis pain.

But surgeons perform some 650,000 such procedures every year!

The underlying point

You need comparative information to make a wise medical decision
Simply *observing* that some people's health improved is not enough.

You need to compare a group of sick people that *was* treated medically...
with a similar group of sick people that *was not*.

Which group got better?
The answer tells us how well medicine works.

Why is that?

Lots of things can help a patient get better ...
including *general health status*, *family supports*, *medical care*, etc

Only a *comparison study* shows the specific impact of medical care.

Any other examples?

Back surgery

A large Ohio-based study of people out of work because of back pain compared

* 725 folks who had *spinal fusion surgery* with

* 725 similar people who had *more conservative treatments* including exercise and physical therapy but no surgery.

The results?

The spinal fusion surgery group was worse off!

Only a quarter of the spinal fusion folks returned to work after 2 years compared to *2/3* of the other group
Total days off from work was almost *4x greater* in the spinal fusion group: 1140 vs. 316

These results, according to the study's lead author, are "consistent with previous studies. The result we've provided is nothing new" according to the New England Journal of Medicine, and has been known for years.

If the results are nothing new, then how well have we learned them?

We do more spinal fusion surgeries today than ever before
We ***increased*** the number of spinal fusion surgeries performed in this country from

About 100,000 in 1997, to
About 300,000 in 2006

Each surgery costs about $50,000.

Lots of money for poorer outcomes.

And we've known this for years. *Hmmmm*

The main point again?

Observations vs. comparisons

The back surgeons *observed* that their patients (some, at least) got better after surgery, so concluded that spinal fusion surgery works. But the *comparative study* suggests that it works less well than alternatives.

Why do we perform so many procedures that work so badly?

We don't know!

Maybe some physicians aren't familiar with the comparative studies.
Maybe some disagree with the study methods or conclusions.
Maybe others simply don't believe the evidence, thinking that their own (observational) results are better than those studied.
Maybe some find other reasons.

For whatever reasons, results of high quality comparative studies may not impact your own medical care --- quite possibly to your detriment.

How can I protect myself?

One thing to do: ask the right question

Ask, whenever your physician recommends a procedure, medication or test:

Can you tell me what *comparative studies* you rely on to make that recommendation?

Ask exactly this question, and make sure you use the words 'comparative study'.

The information should look like the knee surgery and spinal fusion studies we referred to in previous slides.

Remember that comparative studies involve 2 groups of similar people, one of which has the medical intervention and the other of which doesn't.

Beware of ***observational studies only*** as justification!

Another thing to do?

Research outcomes

You can find lots of outcome information on various websites.

We encourage you, when you do a web search, to include the word outcomes.

For example, search for spinal fusion surgery **outcomes**, not just spinal fusion surgery. Look for articles about comparative studies.

Then discuss your research with your doctor.

You'll probably have a better discussion than you would have had otherwise.

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Check-In #6: Annual physicals

Some 60 million Americans get annual physicals. Many people – employees, patients, consumers and physicians - believe that annual physicals are necessary for good health. But recent evidence suggests that this may not be the case, and that, in fact, some aspects of the annual physical may actually cause more harm than good. This module asks some fundamental questions about the annual physical and, in particular, discusses two very different ways that patients can use them. As you read this, ask yourself which way works best for you, and which way have you used annual physicals in the past. Consider also the impact that this discussion might have on your clients.

Introductory Statement of the Problem:

Lots of Americans get annual physicals.

Physicals account for about 8% of all doctor visits and cost about $8 billion per year.

But do physicals do any good?

Specifically...

Is there any evidence that people who have physicals live longer than people who do not?

Some background

About 60 million Americans get an annual physical...

...typically consisting of some or all of these tests:

Blood pressure
Heart rate
Respiration rate
Lung function
Complete blood count
Cholesterol
Urinanalysis
Electrocardiogram
Chest X-ray
Stress test ... and often more.

Which are necessary?

We don't know!

In fact there's no medical board that tells doctors which tests to perform at your annual physical!

Really?

Really!

No major North American health-related organizations recommend the routine annual exams
Professor Ateev Mehrotra of the University of Pittsburgh Medical School.

Why is that?

Lack of evidence about benefits
In the 1960s and 70s, two large randomized controlled trials were conducted, and both studies showed little positive impact — people who had physicals did not seem to live longer or have less illness than those who did not have physicals.
Dr. Ateev Mehrotra, assistant professor at the University of Pittsburgh School of Medicine, 2007

There's no strong evidence base for the periodic health exam
The American College of Physicians, 2010

Current evidence does not support an annual screening physical examination for asymptomatic adults
The Archives of Internal Medicine, 2005

The annual physical gets a thumbs-down from public-health researchers who find no real evidence to support its effectiveness, despite tradition and widespread use.
Dr. Benjamin Brewer, Wall Street Journal, January, 2009

Why do so many physicians give annual physicals?

Because they do

It's what I was taught and it's what patients have been taught to expect
Dr. Barron Lerner, an internist and historian of medicine at Columbia University's College of Physicians and Surgeons

Why pick that fight? Why try to explain 10 years of evidence-based medicine so the patient will understand?
Dr. Stewart Rogers, an internist at Moses Cone Hospital in Greensboro, NC

Patients will think they have not gotten their money's worth if there is no laying on of hands.
Dr. Steven Woolf, professor of family practice at Virginia Commonwealth University

The coverage of the physical is something [insurance] companies do as a result of requests from our customers
Larry Akey, a spokesman for the Health Insurance Association.

But certainly there is some benefit to seeing your doctor regularly!

Yes!
Time together helps you and your PCP build a good working relationship.

In other words, how I use my time with my doctor matters

Partnering or testing

Annual meetings with your doctor can promote the true partnership that we discussed in module #4 (How to Choose a PCP).

Excessive testing, however, may not enhance that partnership and *may even harm you*.

Testing may harm me?

Maybe...
There's an old adage in medicine: the more you test, the more you find.

Today's medical testing technologies often identify 'false positives' --- *indications* that you have a medical problem when, in fact, you *do not*.

But once discovered, doctors and patients often want to *do* something ... more tests, or possibly treatment or medications for a problem that doesn't exist.

'Doing something' may be more harmful than doing nothing.

Says who?

The US Preventive Services Task Force
The USPSTF is part of the Department of Health and Human Services.

It conducts scientific evidence reviews of many preventive health care services and develops clinical recommendations.

The USPSTF's recommendations are considered the “gold standard” for clinical preventive services

What are some of their recommendations?

Some tests can help you...some can harm you...and some are in between. Here's a sample

Screening for High Blood Pressure
The USPSTF **recommends** screening for high blood pressure in people over 18 years old.

Screening for Coronary Heart Disease
Recommends **against** routine screening with resting electrocardiography, exercise treadmill or electron-beam computerized tomography ... in adults at low risk
because of the false positive risk

Screening for Chronic Obstructive Pulmonary Disease
Recommends **against** screening adults for chronic obstructive pulmonary disease (COPD) using spirometry
because of the false positive risk

Screening for Skin Cancer
The current evidence is **insufficient** to assess the balance of benefits and harms of using a whole-body skin examination for the early detection of cutaneous melanoma, basal cell cancer, or squamous cell skin cancer in the adult general population.
*The USPSTF cannot determine if the **risks** of misdiagnosis and overdiagnosis exceed the **benefits** of early detection, or vice-versa.*

But my doctor recommends all these tests, and more

How you relate to your PCP matters
Do you partner with your PCP in your own medical decision-making?

If so...

Discuss with your PCP how best to use your annual meeting time together.

lots of tests? lots of discussion? which tests? which topics?

What's the answer?

If you discuss these issues thoroughly...
... and you don't *automatically* do what your doctor wants after, perhaps, a short discussion...

then you probably have a good partnership.

And you'll probably make good decisions together.

But...

If you don't have a satisfying discussion...
then you may have the wrong doctor.

Whatever his / her position on testing or annual physicals...

It may not work well *for you.*

OK - So now give me the bottom line ... are annual physicials good or bad?

That depends on what you and your PCP partner decide
together.

(Remember...we aim to *empower* you, not *tell you what to do*. Becoming a wise consumer isn't easy. Good luck)

Module #7: Which medical risks matter most?

We have, these days, far more information about medical diseases than we have ever had before. One advantage of this: we can treat more diseases than previously. But one disadvantage: we look for more diseases than previously. Recent studies have suggested that the more we look for diseases, the more we find, and the more we treat. This raises a fundamental question for a wise consumer: which diseases should I worry about the most? Unless a consumer can answer this question, then all diseases are equally important. This can lead to excessive and unnecessary care, or care that provides little or no benefit but increases the patient's costs and risks. This module introduces the idea that some diseases, or medical

risks, are more important than others, and more worthy of medical attention. As you review this module, ask yourself which diseases matter most to you. We also encourage you to discuss this with your physician to help you and your doctor focus on the most important disease risks.

Introductory Statement of the Problem

Some people worry *too much* about their health and get too much medical care.

Others worry *too little,* and don't get enough care.

You want to get just the *right amount* of medical care...not too much or too little.

This module helps you decide which diseases to worry about ... and which not to.

Which risks matter most?

You wear a bike helmet when you ride a bike.
But you don't wear one when you walk. Why?

I know the answer! Different risks
Bike riding is more dangerous

Yes, you *instinctively* know this and adjust.

Wearing a helmet is annoying and costs money. Plus it makes you look like a dork.

You won't wear it unless the risk justifies the cost ...
even if wearing a helmet while walking is safer!

More risks?

You wear a seat belt to drive your car but not to sit at your kitchen table.

OK, why?

Reason**:** Car driving is more dangerous, so you adjust.
You wouldn't wear a seat belt at your kitchen table *even if this reduced your chance of falling off your chair and hurting yourself by 30 - 40%!*

How does this relate to my medical care?

Lots of disease risks
Just like you have different risks in normal life from walking to bike riding to car driving ...

*so you have different **medical risks** for every disease from heart failure to skin cancer, and athletes foot to head trauma.*

Our question today: which medical risks are ***high enough*** to worry about and seek preventive medical care for....like wearing a bike helmet or seat belt?

How can I decide this?

Your chance of having a first heart attack, or dying from a specific disease or developing some other health problem *without* medical intervention is called your **starting risk.**

We'll describe the starting risks for some well-known diseases in the next few slides.

Which - if any - would ***you*** worry about ... and seek preventative treatment for?

We'll tell you the names later...no peeking!

OK, let's start

Disease #1
Disease #1 rarely shows symptoms, but doctors can determine if you're ***at risk*** with a simple blood test.

The test gives you a number.
If your number is above a certain point, then you're *at risk*.
If it's below, then you're *not at risk*.

About 97% of the at risk folks ***still*** do not develop this disease.
In other words, about 97% of people with a high test number are not harmed by it.

Of the roughly 3% who are harmed by this disease, very few die of it.

Would you worry about it?

What is Disease Number 1?

Disease #1 is a first heart attack
The at risk population is people *with* high cholesterol but *without* heart disease.

About 3% of people with high cholesterol but without heart disease will have a non-fatal heart attack in the next few years.

Did you think this was a high enough ***starting risk*** for people with high cholesterol to worry about?

I'm not sure, but maybe. What's Disease #2?

Disease #2

Disease #2 kills about 5 out of 1000 people over 10 years.

About 995 out of 1000 people do not die of it and generally are not harmed by it.

Would *you* worry about getting this disease?
Would *you* choose to be tested for it ... if the test itself posed some danger?

I'm not sure. It only affects 5 in 1000? I'll have to think about that. What is Disease #2?

Disease #2 is breast cancer

About 5 women per 1000 in their 50s will die of breast cancer.

About 995 will not die.

Did you think this is a big enough *starting risk* to worry about?

I'll get back to you on that one. How about Disease #3?

Disease #3

Disease #3 kills about 1 or 2 out of 1000 people over 10 years.
It otherwise generally doesn't harm you.

About 998 out of 1000 people are not killed by it.

Would you worry about this disease?
Would you get tested for it *if the test itself posed some danger*?

Again, I'll have to think about that and probably talk to my doctor.
What is Disease #3?

Disease #3 is prostate cancer
Between about 1 and 2 men per 1000 in their 50s will die of prostate cancer over the next 10 years.

About 998 or 999 out of 1000 men in their 50s will not die of it.

Did you think this was a big enough risk to worry about?

<u>These questions are hard to think about! What's Disease #4?</u>

Disease #4 is a fatal genetic disease.

If *1* parent has the gene, the offspring have a 50% chance inheriting it;
If *both* parents have the gene, the offspring will probably inherit it.

Although everyone who *inherits* this gene doesn't *develop* the disease,
people who develop the disease all die of it within about 3 years.

Would *you* worry about it?
Would *you* get tested and choose your spouse (in part) to avoid passing it on?

<u>Wow. That sounds risky. I'd like to learn more. What is this disease?</u>

Disease #3 is Fatal Familial Insomnia

It was first discovered in Venice in 1765.

Since then, about *100 people have died of it* while *hundreds of millions* of people were unaffected.

Your chance of developing this disease is about 1 in 100 million (give or take a few million).

Did you think this was a big enough *starting risk* to worry about?

<u>No, not with a starting risk of 1 in 100 million.</u>
<u>What diseases should I worry about?</u>

We can't tell you when to worry

That's for you and your doctor to decide.

Some people worry that a 1 in 100 million risk - fatal familial insomnia for example - is high and want to take precautions.

Others think that a 30 in 1000 risk - of a non-fatal heart attack among high cholesterol folks - is low and don't worry about it.

Though we can't tell you what to worry about, we can help you in 2 ways.

<u>What's the first way you can help me?</u>

We'll help you frame discussions with your doctor

You and your physician can discuss your starting risks of various diseases and together decide which are worthy of medical attention.

Your ***starting risk*** tells you which diseases are *more dangerous* or *less important*.

Absent starting risk information, you can't tell - ***all diseases are equally important!***

This can confuse you and lead to unnecessary worry and medical care.

What's the second way you can help me?

We'll help you understand the impact of medical care
You can estimate medicine's impact once you know your starting disease risks.

Remember the bicycle helmet example:

- *You wear a helmet when riding* because your starting risk is *high enough* to justify the expense, hassle and look;
    - But you don't wear a helmet when walking because the starting risk is *too low...*even if wearing a helmet could benefit you. You know that almost instinctively.

Medical care is like the helmet. It can work well, but has costs and side effects. You only want to get medical care when your starting risks are high enough to justify it.

If you don't know your medical starting risks, you'll likely overestimate - or underestimate - medicine's beneficial impact.

How should I proceed?

Discuss all this with your doctor
Whenever you consider medical care - a screening test, medication, surgery etc ...
ask your doctor *'what is my starting risk'?*

Here's a way to phrase this:

Out of 1000 people like me, how many will have a first heart attack?
or die of breast cancer or suffer a broken hip, etc

Be sure to get your answer in this form:

Out of 1000 people like you, about x will have a first heart attack.

Remember today's message: knowing your starting risk is a necessary step to making wise medical decisions.

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Module 8 - Introducing NNTs

Physicians often counsel their patients with statements like this: 'this medication is very effective' or 'this test is very reliable'. A wise patient might respond 'how much better is it than another medication or test?' We have not, until recently, had a way to compare the effectiveness or reliability of various medications, tests or procedures. But recently researchers have developed a new scale for measuring the effectiveness of tests, medications, procedures and therapies. The scale is called the Number Needed to Treat or NNT. This tells us how many people need to take a particular medication, or have a test, for one person to benefit. As you read this module, ask yourself if you have ever been in a situation where you could have used this information. Or indeed, if you have ever asked your doctor which medication works best only to receive ambiguous answers like 'this one is very good, but so is that one. I suggest you try them both to see which you prefer.' Then consider whether or not you find that answer very satisfying.

Introductory Statement of the Problem

Many people think that medications, screening tests, surgical procedures or other medical treatments work 100% of the time.

In other words, they think that
you take a medication and you get better
or
you have a screening test and know if you have cancer.

You may believe this yourself.

Unfortunately, it is not always true!

Really?

Some medical treatments work better than others
Some *medications* work better than others.

Some *screening tests* are more reliable than others.

Some *therapies and surgeries* are more effective than others.

For example?

You may have heard people say

'Over-the-counter sleeping pills don't put me to sleep'

In fact, sleeping pills work for some people but not for others.

Our question today:

How can you tell *how well* medications work?

OK, I'll bite. How can I tell?

One way: learn the *Number Needed to Treat* (NNT)

The *Number Needed to Treat* (NNT) tells how many people need to take a pill (or have a medical treatment) for 1 person to benefit.

Give me an example

Heart attack prevention
About 100 people need to take *statin* medications to prevent 1 heart attack.

The *Number Needed to Treat* with statins is about 100.
(there are lots of refinements to the average calculation)

or

About 23 people need to switch to the *Mediterranean Diet* to prevent one heart attack.

The NNT of the Mediterranean Diet is about 23.

This comparison tells us that the Mediterranean Diet is about 4x more powerful for preventing heart attacks than statin medications.

Can we get the Number Needed to Treat for lots of procedures?

Here are some examples

CT lung cancer screening in high-risk smokers to avoid lung cancer death: NNT = 217 (references below)
High blood pressure medicine for preventing heart problems, over age 60, 1 year:NNT = 100
Lowering salt intake for preventing heart problems after a heart attack or stroke:NNT = 42
Quitting smoking for preventing death or heart attack after a heart attack or stroke:NNT = 8
Hormone replacement therapy for preventing hot flashes: NNT = 3
Vitamin D for preventing bone fractures in elderly folks: NNT = 36

Steroids for toddlers with the croup to help them breath more easily: NNT = 5
MRI compared to X-ray to evaluate chronic lower back pain: NNT = infinite (no benefit found from the MRI)

What is a good Number Needed to Treat?

We don't have a consensus

Some people think that an NNT of 10 is *bad*

An NNT of 10 means that 1 out of 10 patients benefit from the treatment, and that 9 out of 10 do not.

Other people think that an NNT of 50 is ***good***

An NNT of 50 means that 1 out of 50 patients benefit from the treatment and that 49 out of 50 do not.

One author - Professor Nortin Hadler of the University of North Carolina - suggests that insurance not pay for any treatment with an NNT of more than 20!
An NNT of 20 means that a treatment is only effective 5% of the time.

How can knowing the Number Needed to Treat help me?

First
You can decide - with your doctor - if a medication, test or therapy is ***worthwhile*** for you.

An NNT of 2 is probably worthwhile.
An NNT of 2000 is probably not.

Second
You can compare

You may have several treatment options, like statins or dietary changes to prevent a heart attack.

The Number Needed to Treat (NNT) tells you which work best.

The NNT seems like basic medical literacy

Yes. The Number Needed to Treat is a way for doctors and patients to share information

Dr. David Newman puts it this way:

Ask for it.

In fact, demand it.

You need to know how much the health interventions you undertake have the potential to help you and which ones matter most.

Wow. It seems like an informed medical consumer should know this.

Many people suggest that knowing the Number Needed to Treat defines being an informed medical consumer

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Module #9 - Introducing NNHs

The same logic that describes the Number Needed to Treat can describe the opposite: the Number Needed for Harm. This provides a standard measurement and way for physicians and patients to evaluate the potential harm from a medication, test or medical procedure. A low NNH (Number Needed for Harm) indicates a greater likelihood of being harmed by the medication, test or procedure. A high NNH (Number Needed for Harm) indicates less likelihood. A wise consumer can compare both the NNT (Number Needed to Treat) and the NNH (Number Needed for Harm) to determine which medications, tests or procedures he/she feels most comfortable having.

Introductory Statement of the Problem

The last module introduced NNT - the Number Needed to Treat - to identify medical treatment effectiveness.

The NNT tells how many people need to have a particular medical intervention for 1 person to benefit.

This module introduces the rest of that story....the NNH, or Number Needed for Harm.

The NNH tells how many people need to have a particular medical intervention for 1 person to be ***harmed*** by a side effect or other problem.

Do I need to know both the NNT and NNH?

Yes, a wise consumer needs to know both, because medicine both helps and harms.

A medication, for example, may settle your upset stomach but give you a headache.

Or a sleeping pill may help you sleep but leave you thirsty.

NNT and NNH information tells us *how frequently* medicine *helps* and *harms.*

Can you give me an example using our old friend, statin medication?

Statins both help and harm
Last month we discussed how some people with high cholesterol but no heart disease take statin medications to avoid heart attacks.

That Number Needed to Treat was about 100.

In other words, *about 100 people with high cholesterol but no heart disease need to take statins to avoid 1 heart attack.*

Today's question:

how many of those 100 people ***are harmed***?

The *Number Needed for Harm* tells us!

Yes. About 9 in 100 people who take statins are harmed by them
Some harms per 100 people taking statins:

About 3 - 5 suffer myalgia or muscle pain because of statin use.

About 3 - 9 develop diabetes

Others report sexual side effects and / or memory loss or other cognitive impairments though we don't have hard numbers on these.

We summarize all this by suggesting the Number Needed for Harm of statins is about 11.

These numbers are rough estimates. We encourage you to review the footnotes at the end of this course and discuss with your own doctor.

How do I proceed?

Compare the NNT and NNH of statins
For every 1 person who avoids a heart attack, 9 suffer harm.

The Number Needed to Treat (NNT) to avoid 1 heart attack: about **100.**

The Number Needed for Harm (NNH) including myalgia, diabetes, sexual side effects and cognitive impairment: about **11.**

Remember: this is for people with high cholesterol but *no history* of heart disease. The numbers change for people with high cholesterol *and* heart disease or who have *already* had a heart attack.

What should you do next?

Discuss this with your doctor
You and your doctor may decide that the benefits outweigh the risks...
or the opposite.

Remember:

You can't make an i*nformed decision* without knowing both the NNT (Number Needed to Treat) *and* the NNH (Number Needed for Harm)**.**

Any other comparisons?

Hormone replacement therapy in menopausal women
Many menopausal women suffer from hot flashes. Hormone replacement therapy can both prevent hot flashes and increase the chance of developing breast cancer.

Absent NNT and NNH numbers, doctors and patient have difficulty deciding if the benefits exceed the risks, or vice versa.

But with NNT and NNH numbers, a woman can make an informed decision.

Here are the numbers:

Number Needed to Treat (NNT) to prevent hot flashes: **3**

Number Needed for Harm (NNH) to cause breast cancer or a nonfatal heart attack:**667**

I've hear about Vioxx, a painkiller with fewer stomach bleeds that was pulled off the market

Vioxx, a painkiller that is easy-on-your-gastrointestinal system, sold over $2 billion annually because it was safer than aspirin or ibuprophen....until it was pulled from the market in about 2004 due to patient harms.

Here are the NNT and NNH numbers:

Number Needed to Treat (NNT) of Vioxx to *prevent* a serious gastrointestinal problem: **200**

Number Needed for Harm (NNH) of Vioxx for *causing* a heart attack, stroke or major coronary event: **59**

Researchers estimate that 60,000 people may have died from taking Vioxx.

Now...do you think you should discuss NNTs and NNHs with your doctor about ***all*** your medications?

Yes!

Remember that all medical interventions contain some element of risk.

A wise consumer learns the NNT and NNH *before* beginning treatment.

Here's the simple question to ask your doctor:

What is the Number Needed for Harm from this test, medication, therapy or surgery?

Knowing this can only help you.

How should I proceed?

Here's Dr. David Newman's advice: ask questions

Push hard if necessary. Do not allow confusion to stand.

When a physician continues to speak in ambiguities, it is often a sign that medical science doesn't have a concrete answer to your question.

Ask if this is the case....

In the long run, both you and your doctor will be happy you did.

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Module #10 - Unnecessary medical care

Unnecessary medical care, by definition, cannot help you but can raise your medical costs and risks. The wise medical consumer seeks to avoid unnecessary care. Many medical researchers estimate that unnecessary care accounts for up to 1/3 of all medical spending in the US. This module summarizes the information in modules 8 and 9, about NNTs (Number Needed to Treat) and NNHs (Number Needed for Harm) to develop a definition of unnecessary care. As you read this, consider whether you yourself, or anyone you know, has ever complained about having unnecessary medical tests or procedures *after the fact*. And then consider whether or not they would have preferred to have this information in advance.

Introductory Statement of the Problem

Unnecessary care accounts for up to 1/3 of all US medical spending.

Avoiding unnecessary care can only help you.

But *having* unnecessary care can harm you, either financially or medically.

This module provides a new definition of unnecessary care that you may wish to discuss with your own doctor.

Let's review the last 2 modules before moving forward

Two modules ago, we introduced the Number Needed to Treat (NNT) to help you determine *how much a medical treatment can help you.*

The last module introduced the Number Needed for Harm (NNH) to help you determine *how much a medical treatment can harm* ***you.***

Now, we'll tie this together to identify unnecessary care

What is *unnecessary* medical care?

Here's a simple definition
Unnecessary medical care has a *high* NNT (Number Needed to Treat) and

a *low* NNH (Number Needed for Harm)

What does that mean?

High NNT means few people benefit

Low NNH means many people are harmed

What is NNT (Number Needed to Treat) again?

Number Needed to Treat is a very powerful measure
It tells how many people need to be treated for 1 person to benefit. Here are some:

Cholesterol-lowering medications to avoid 1 heart attack in high cholesterol folks without heart disease,
NNT = about 100;

CT lung cancer screening in high risk smokers to prevent 1 lung cancer death,
NNT = about 217

Quitting smoking to prevent death or heart attack after a heart attack or stroke,

NNT = about 8

What is a high NNT?

Here's one suggestion
Professor Nortin Hadler of the University of North Carolina thinks that health insurance not pay for treatments with NNTs greater than 20.

An NNT of 20 means that the treatment only benefits 1 out of 20 people who have it;
19 out of 20 do not benefit from it.

Stated differently:

A treatment with a Number Needed to Treat of 20 only benefits 5% of patients.

Do most people agree with Professor Hadler that this is high?

People disagree

Some people think an NNT (Number Needed to Treat) of 20 is too stringent.
They might prefer an NNT of 40, 50 or maybe even 100.
An NNT of 100 means that 99 out of 100 patients do not benefit from a particular medical intervention.

Others think a Number Needed to Treat of 20 is too lenient.
They might prefer an NNT of 15 or even 10.
An NNT of 10 means that 9 out of 10 patient do not benefit from a particular medical intervention.

We take no position on this.

We only suggest that you answer - with your own doctor - this question:

At what Number Needed to Treat is medical care so ineffective that I don't want it?

10? 20? 50? 100? or more?

Decide for myself...

With your doctor's help, of course
But once you decide which NNT is too high to provide benefit to you....

avoid those treatments!

That's Step 1 of Avoiding Unnecessary care: *avoid treatments that probably won't benefit you!*

What about harm...the NNH?

The Number Needed for Harm is also a powerful measure

It tells you how many people need to have a medical treatment for 1 person to be *harmed.*

Here are some NNH measures:

Statin medications, NNH = about 11
That means 1 in about 11 people who take statins are harmed by them

Hormone Replacement Therapy, NNH to develop breast cancer = about 667
That means 1 in about 667 women who take Hormone Replacement Therapy develop breast cancer

PSA screening for prostate cancer, NNH = about 60 for impotence or incontinence
That means 1 in about 60 men who are screened regularly end up impotent or incontinent

What's the NNH rule of thumb?

The lower the Number Needed for Harm, the greater the risk
An NNH (Number Needed for Harm) of **5** means that
1 in 5 people who have a medical treatment are harmed by it.

An NNH of **10** means that
1 in 10 people who have a medical treatment are harmed by it.

An NNH of **667** means that
1 in 667 people who have the medical treatment are harmed by it.

What do *you* think is high or low?

Where would *you* set the bar?

I'll talk to my doctor.

Good. That's Step 2 of avoiding unnecessary care: *avoid care that is highly likely to harm you.*

Decide with your doctor the answer to this question:
At what Number Needed for Harm is the care too dangerous for me?

5? 10? 667?

Step 2 of Avoiding Unnecessary Care: *avoid care that will likely* harm *you.*

The unnecessary care equation again

Unnecessary Care =
High Number Needed to Treat + Low Number Needed for Harm.

Now...Let's put everything together....

If I have a true partnership with my PCP (from module 4) ...

and

I use my Annual Physical time to discuss my concerns about unnecessary medical care (from module 6) ...

Then I can frame your unnecessary care discussion around NNTs, NNHs and Starting Risks.

But...

If I haven't laid the groundwork...

If I *don't* have a true partnership, and I use my Annual Physical time *differently* ...

Then I may not have the unnecessary care discussion ...

And I may not be as wise and empowered a medical consumer as I would like to be.

Interesting. I haven't heard things put like this before. Thanks.

Summary and Conclusion

This course outlined a key ethical issue for health insurance brokers: should brokers 'let the buyer beware' or 'do their fellow a favor'? Brokers know that healthcare buyers often make unwise purchasing decisions. We suggested that this knowledge creates an ethical responsibility on the part of the broker to educate his/her clients about how to choose medical care. We based this recommendation on the Biblical story of Abraham's purchase of a burial plot for his wife – the first commercial event in the Bible. We suggested that the ethical principles derived from this story are relevant and important to health insurance brokers in today's market.

This course then looked at the general idea of Consumer Driven Health Care and suggested that this is a misnomer. We really do not have, in this country, true consumerism in healthcare.

One key reason for this: consumers lack the tools necessary to shop wisely for their own medical care. As evidence of this poor shopping ability, we presented data showing how Americans spend far more on their medical care than do other advanced industrialized countries. As one specific case of this, we showed that Americans consume far more medication / pharmaceutical products than do inhabitants of other, similar countries. Unfortunately, even as a result of this high level of spending and medical consumption, Americans enjoy relatively poorer outcomes, as measured, for example, by longevity. This suggests that Americans waste many of their medical resources. Indeed, researchers suggest that up to 1/3 of all medical spending is wasted on unnecessary care. That is care that does not benefit the patient but raises his or her costs and risks.

This creates ethical responsibilities for the broker. Knowing that these problems exist, the ethical broker needs to address them. Remember, as we discussed in Part 1, the notion of 'let the buyer beware' is unethical, while 'do your fellow a favor' is ethical. We suggested, in Part 3, a modular approach to 'do your fellow a favor' by presenting 10 short education modules designed to teach consumers some questions to ask their physicians in an attempt to avoid unnecessary medical expenses and care.

Module 1: Understanding Medical Claims. This module helped people know which statistics are meaningful to them when buying medications, or when considering a medical test, therapy or procedure. This is important because people often get confused about medical claims. This module helps people compare the benefits and harms of a particular medication, test, or therapy.

Module 2: How to Choose a Hospital. The hospital's track record of treating patients with your medical condition is the single best indicator of your likely outcome of a hospitalization. Other indicators - technology, famous surgeons, teaching hospital vs. community hospital - do not predict your outcomes as well.

Module 3: How to Choose a Specialist. The single best indicator of a specialist's results for a particular patient is his/her track record with other, similar patients. Unfortunately, we generally have poor public information about outcomes by specialist. Some specialists, however, may keep their own records. A wise consumer can ask. Absent that information, the next best indicator of a specialist's results is the number of patients he/she has treated. In medicine, patient outcomes often (but not always!) correlate with the number of times a specialist has treated similar patients.

Module 4: How to Choose a PCP. The role of the primary care physician differs from the role of the specialist much of the time. The specialist's main responsibility is either to return a sick person to better health, or to manage a chronically ill person. The PCPs main responsibility is to keep relatively healthy people healthy. As such, the criterion for choosing a PCP differs from the criterion for choosing a specialist. One useful way to consider choosing a PCP is the human relationship factor, and the trust level a patient has for his/her primary care doctor.

Module 5: How Can You Tell if Medicine Works. Comparative studies compare a group of people who had a particular medical intervention with a similar group of people who did not. This is the best way to determine how much the medical intervention helped. Other kinds of

studies do not tell us how important a medical intervention is, compared to, for example, strong family support, a positive mental outlook, some genetic predisposition or other factors.

Module 6: Understanding Annual Physicals. People can use their annual physicals in one of two different fashions. Some choose to have lots of tests and to watch as their test results change over time. Others choose to spend their annual physical time primarily talking with their physician. There are advantages and disadvantages of both. The most relevant factor: how comfortable both the patient and the physician feel with the use of their annual physical time together.

Module 7: Disease Risks. Patients face different risks of developing various diseases, like heart disease, cancer or fatal familial insomnia. Some people worry about a 1 in 100,000 risk and seek medical care to prevent that. Others do not worry about a 1 in 100 risk. The wise patient understands his or her own disease risks and decides which to worry about and seek treatment for, and which not to. Absent this information, all diseases are equally important. This may result in the patient receiving too much - or too little - medical care.

Module 8: NNTs. The Number Needed to Treat tells how many people need to take a medication or have a test, procedure or therapy for 1 person to benefit. Patients and physicians who know NNT data can answer two key questions. First, how well does this medical treatment work? Second, which medical treatment works best? The lower the NNT, the better the medical treatment works.

Module 9: NNHs. The Number Needed for Harm tells how many people need to have a medical test, procedure or therapy, or need to take a medication, for one person to be harmed. Patients and physicians who know NNH data can answer two key questions. First, how much harm (or risk) does this medical treatment pose? Second, which medical treatments pose the least patient risk? The higher the NNH, the less risky the treatment.

Module 10: Unnecessary Care. This module ties NNT and NNH information together. As a general rule, care with a high NNT is less necessary than care with a low NNT, because care with a high NNT generates less benefit to any individual patient. Also, as a general rule, care with a low NNH poses more risk to any individual. Wise patients may elect to avoid care with a high NNT and a low NNH.

We hope that this introduction to medical consumerism helps brokers act more ethically in their business dealings with clients, and helps their clients spend their discretionary medical resources more wisely.

Footnotes and References:

These 10 Modules come from the first 10 Monthly Check-Ins on TheMedicalGuide www.TheMedicalGuide.net. Each Check-In is fully footnoted. Here are the appropriate links:

Module 1: http://www.themedicalguide.net/medrq/live.htm?id=1218
Module 2: http://www.themedicalguide.net/medrq/live.htm?id=1365

Module 3: http://www.themedicalguide.net/medrq/live.htm?id=1438
Module 4: http://www.themedicalguide.net/medrq/live.htm?id=1397
Module 5: http://www.themedicalguide.net/medrq/live.htm?id=1252
Module 6: http://www.themedicalguide.net/medrq/live.htm?id=1418
Module 7: http://www.themedicalguide.net/medrq/live.htm?id=1263
Module 8: http://www.themedicalguide.net/medrq/live.htm?id=1500
Module 9: http://www.themedicalguide.net/medrq/live.htm?id=1533
Module 10: http://www.themedicalguide.net/medrq/live.htm?id=1559